**Resume/Siddik Sarkar**

1. Name : SIDDIK SARKAR

2. Date of Birth : 12/09/1982 (dd/mm/yyyy)

3. Sex (M/F): M

4. Designation: Scientist

5. Department : Cancer Biology & Inflammatory Disorder

6. Institute/University : CSIR-Indian Institute of Chemical Biology

7. Address : 4 Raja S.C. Mullick Road, Jadavpur, Kolkata, WB PIN :733127

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1. Specialization/Research Areas: Cancer Biology, Immunotherapy, Genomics
2. Education Details (Post-graduation onwards & Professional Courses)

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| --- | --- | --- | --- | --- |
| Sr. No. | Degree  Awarded | Institution/Place | Year | Field Of Study |
| 1 | PhD | IIT Kharagpur | 2011 | Cancer Biology |
| 2 | M.Sc | IITRoorkee | 2004 | Biotechnology |

1. Employment Details: Position and Employment (Starting with the most recent employment)

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| --- | --- | --- | --- | --- |
| Sr. No. | Institution/Place | Designation | From Date | To Date |
| 1 | CSIR-Indian Institute of Chemical Biology | Scientist | March 2018 | Ongoing |
| 2 | Academy of Scientific and Innovative Research (AcSIR) | Assistant Professor | Jan 2019 | Ongoing |
| 3 | Rutgers, The State University of New Jersey, NJ, US | Research Associate | Oct 2015 | Oct 2017 |
| 4 | Virginia Commonwealth University, VA, US | Post-doctoral Research | Oct 2010 | May 2015 |

1. Awards/Honors Details:

**2019:** First prize (Cah money of Rs 50,000/-) organized by The Biotechnology Industry Research Assistance Council (BIRAC) and IKP Knowledge Park (IKP) on an idea exposition from Sept 20 - 21, 2019.

**2016-2017**: Received 1 year (2016-2017) research grant (An Effective Chemotherapeutic Approach for Ovarian Cancer Intraperitoneal Metastasis) sponsored by New Jersey Health Foundation. Amount: $ 40,000. Role: Co-PI.

**2017**: Received Gallo Award for scientific excellence presented by Rutgers Cancer Institute of New Jersey for outstanding cancer research “Combination therapy using SN38 and MMAE to kill cancer stem cell-rich ovarian ascites” (May 2017).

**2016**: Received Gallo Award for scientific excellence presented by Rutgers Cancer Institute of New Jersey for outstanding cancer research “Development of therapeutic protocol for drug resistant ovarian cancer” (May 2016).

**2011-2013**: Received 2 years’ Postdoctoral fellowship grant (Award Number: W81XWH-11-1-0186. Developing an Effective Therapy for Prostate Cancer. Funding Mechanism: Prostate Cancer Training Award – Postdoctoral – Ph.D or M.D. Award Amount: $116,020.00.) sponsored by U.S. Army Medical Research and Materiel Command, Fort Detrick, Maryland, US.

1. Details of ongoing/completed projects.
2. Pan-CSIR Cancer Research Program “Making Cancer Care Affordable” Empowering Women’s Health: Focusing on Breast and Gynaecological Cancers of Indian Relevance, HCP-040 (2021-0ngoing)
3. Suicidal genetherapy using engineered secretory carboxylesterase-2/Camptothecin-11 targeting chemoresistant ovarian serous adenocarcinoma (Sanction no. SRG/2019/001880, Funding Agency: DST/SERB, 2019- 2022).
4. Modern innovative solutions for Environmental/Occupational Lung Health challenges (NCP project, CSIR, MLP-137)
5. Molecular digital Surveillance of COVID-19 samples at IICB (Whole genome sequencing of COVID-19 samples; MLP-132)
6. Effect of non-invasive magneto acoustic stimulation to enhance drug entrapment in cancer cells (Award No. DBT-RA/202 1 /January/N/189)
7. Noninvasive Magnetoacoustics Stimulation in Cancer Therapeutics and Delivery, (IP1-SS/611), Funding agency, CSIR/CSIR-IICB; 2022- Ongoing
8. Indian SARS-CoV-2 Genomics Consortium (INSACOG), Scientist-in-charge from CSIR-IICB. (2021-Ongoing)
9. Publications of the last 5 years in relevant areas.
10. Sarkar P, Banerjee S, Chakrabarti S, Chakrabarti P, Bandyopadhyay A, Mitra AG, Saha S, Roy A, Sarkar S\*. Genome characterization, phylogenomic assessment and spatio-temporal dynamics study of highly mutated BA variants from India [published online ahead of print, 2022 Nov 15]. Indian J Med Microbiol. 2022; S0255-0857(22)00232-8. doi:10.1016/j.ijmmb.2022.10.006
11. Basu D, Chakraborty S, Pal R, Sharma TK, Sarkar S\*. Identification and Engineering of Aptamers for Theranostic Application in Human Health and Disorders. Int J Mol Sci. 2021;22(18):9661. Published 2021 Sep 7. doi:10.3390/ijms22189661
12. Chandra Jena B, Sarkar S, Rout L, Mandal M. The transformation of cancer-associated fibroblasts: Current perspectives on the role of TGF-beta in CAF mediated tumor progression and therapeutic resistance. Cancer Lett 2021, 520:222-232.
13. Gaur V, Chaudhary S, Tyagi A, Agarwal S, Sharawat SK, Sarkar S, Singh H, Bakhshi S, Sharma P, Kumar S. Dysregulation of miRNA expression and their prognostic significance in paediatric cytogenetically normal acute myeloid leukaemia. Br J Haematol. 2020 Mar;188(6):e90-e94. PubMed PMID: 32077100.
14. Malekshah OM, Sarkar S, Nomani A, Patel N, Javidian P, Goedken M, Polunas M, Louro P, Hatefi A. Bioengineered adipose-derived stem cells for targeted enzyme-prodrug therapy of ovarian cancer intraperitoneal metastasis. J Control Release. 2019 Oct;311-312:273-287. PubMed PMID: 31499084.
15. Sarkar S, Malekshah OM, Nomani A, Patel N, Hatefi A. A novel chemotherapeutic protocol for peritoneal metastasis and inhibition of relapse in drug resistant ovarian cancer. Cancer Med. 2018 Aug;7(8):3630-3641. PMID: 29926538
16. Kumar BNP, Puvvada N, Rajput S, Sarkar S, Mahto MK, Yallapu MM, Pathak A, Emdad L, Das SK, Reis RL, Kundu SC, Fisher PB, Mandal M. Targeting of EGFR, VEGFR2 and Akt by engineered dual drug encapsulated mesoporous silica-gold nanoclusters sensitizes tamoxifen-resistant breast cancer. Mol Pharm. 2018 Jul 2;15(7):2698-2713.PMID: 29787277
17. Sarkar S\*, Konar S, Prasad PN, Rajput S, Kumar BNP, et al. Micellear Gold Nanoparticles as Delivery Vehicles for Dual Tyrosine Kinase Inhibitor ZD6474 for Metastatic Breast Cancer Treatment. Langmuir. 2017 Aug 8;33(31):7649-7659. PubMed PMID: 28701038. (Corresponding author)